

The listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1-10 (canceled).

Claim **11** (new). Method for aerating multiple membrane modules of a membrane filter system operating in submerged operation,

whereby air or a gas is supplied to the membrane modules from a common source, which air or gas rises in the liquid to be purified, in the form of bubbles, on the outside of the membrane, and

whereby valves are disposed in the feed lines to the membrane modules, which valves are activated according to a predetermined circuit schematic,

whereby control valves are used as valves, which can assume only either the open or closed position, and thus release or block the supply of air to an assigned membrane module,

that in a first method step, the control valve assigned to a first membrane module is open, while the control valves of all the other membrane modules are closed, so that aeration of the first membrane module takes place,

that at the beginning of a second method step, the control valve assigned to a second membrane module is additionally opened, so that during this method step, two control valves are open at the same time and two essentially stationary partial air streams occur, with which the first and the second membrane module are impacted,

that at the beginning of a third method step, the control valve assigned to the first membrane module is closed, for aeration of the second membrane module, and

that all of the membrane modules are aerated in accordance with the three method steps, one after the other, until the aeration cycle starts anew with the first membrane module.

Claim 12 (new). Method according to claim 11, wherein to avoid penetration of liquid into air-carrying parts of the membrane modules, a blocking air volume stream flows through all of the feed lines, even when the control valves are in the closed position, which stream is small in comparison with the aeration air stream that exits when the control valve is open.

Claim 13 (new). Method according to claim 12, wherein the blocking air volume stream amounts to less than 5% of that of the volume stream that exits from the corresponding feed line when the control valve in question is the only one in the open position.

Claim 14 (new). Method according to claim 11, wherein the aeration cycle amounts to more than 60 s, preferably more than 120 s.

Claim 15 (new). Method according to claim 11, wherein within the aeration cycle, all of the membrane modules are aerated with partial air streams, at the same time, once or multiple times, which partial air streams result from opening of all of the control valves.

Claim 16 (new). Method according to claim 11, wherein different groups of at least three membrane modules are impacted with the total air stream, within the aeration cycle, one group after the other, whereby the air stream distributes itself approximately uniformly over the membrane modules that belong to the group, by means of opening the control valves, and whereby the control valves on all the other membrane modules are closed.

Claim 17 (new). Method according to claim 11, wherein of the membrane modules are aerated simultaneously, by means of opening the assigned control valves, between the aeration cycles.

Claim 18 (new). Method according to claim 11, wherein a group of at least three membrane modules is impacted with the air stream, in each instance, between the aeration cycles, whereby a first group of membrane modules is selected between the first and

the second aeration cycle, a second group of membrane modules is selected between the second and the third aeration cycle, etc.

Claim 19 (new). Method according to claim 18, wherein the time during which all of the membrane modules are or a group of at least three membrane modules is aerated at the same time is at least just as long as the time interval during which the membrane modules are individually aerated during the aeration cycle.